

The following table contains a summary of the public comments received by the Vermont Public Service Department (PSD) regarding VY's decommissioning, the SAS and the PSDAR draft (as of December 10, 2014).

By far, the most common request in the received comment sets was the retention of the current 10-mile Emergency Planning Zone (EPZ) beyond the planned "hot wet" spent fuel storage period (i.e. beyond April 2016). In a total of 41 public comment sets, 32 sets requested retaining the current EPZ at least until all spent fuel is moved to dry cask storage. Of these 32 comments, 2 request retaining the current EPZ until all spent fuel is removed from site. 3 of the 32 comments request expanding the EPZ to 50 miles. 4 additional comments requested some modification of the currently used and proposed on-site dry cask storage systems.

Roughly half of the received comments included additional requests. While similar comments were seen in several of the comments set, no comment subject other than the EPZ was repeated more than 5 times in the various comment sets.

Summary of Public Comments Received by the VT Public Service Department Regarding Vermont Yankee's Decommissioning, the Site Assessment Study & the Draft Post-Shutdown Decommissioning Activities Report				
Geographic Source of Comments	Request EPZ until all Fuel in Dry Casks	Request EPZ until all Spent Fuel is Offsite	Request Expansion of EPZ to 50 miles	Additional / Other Requests in Comments
North Bennington, VT	•			
Putney, VT	•			
Amherst, MA	•			
Plainfield, MA		•		Protect spent fuel from possible attacks; surround casks with earth berm
Fairlee, VT	•			Keep track of long term safety of VT Yankee
Ashfield, MA	•			
Colrain, MA	•			Maintaining the EPZ should be a condition for receiving the CPG for the second ISFSI
Received via phone	•			Concerned spent fuel is vulnerable to espionage
Received via email		•		Very concerned about loss of SFP water & risk of Zirconium fire
Received via email (noted as within	•			

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"radius of danger")				
Brattleboro, VT	•			Concerned PSD does not care about people "living in the zone."
Received via email	•			
Received via email	•			
Received via email	•			Expedite move to dry cask by spending DTF money.
Greenfield, MA	•			Concerned that there is not enough money in the DTF for plant decommissioning & spent fuel storage
Amherst, MA	•			Stop polluting the Connecticut River
No address provided	•			
Connecticut	•			
No address provided	•			
Burlington, VT	•			
No address provided	•			
No address provided	•			
Lake Pleasant, MA	•			
Turners Falls, MA	•			
No address provided	•			
North Bennington, VT	•			
Brattleboro, VT	•			
Amherst, MA	•			Requests "highest standards" for site restoration; concerned how spent fuel is protected from terrorists
Received via email		•		Emergency evacuation site at GCC is too close to site; move further away.
Greenfield, MA	•		•	Opposes increase in notification time to 60 minutes; EPZ funding should come from Entergy profits rather than DTF.
Greenfield, MA	•		•	Requests independent Site Assessment be done in addition to one completed by Entergy; consider using spent fuel systems currently used in Germany, France & Japan which are superior to ones currently used at VY.
Westminster, VT	•		•	Use more robust dry cask standards implemented in Europe & Japan; plan

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				for addressing high burnup fuel after spent fuel pool is gone; remove all soil to at least 3 feet below grade, or further until no radiation detected.
Received via email				Thanks PSD for efforts to date.
Received via email				Requests long term emergency management, safety precautions for waste transport & an independent Site Assessment.
Hadley, MA				Suggests selling VY as a potential bed & breakfast.
Wilder, VT				Do not use SFP as an excuse for full complement of emergency measures; don't waste taxpayer money challenging federal jurisdictions
Brattleboro, VT				Assure that Entergy restores VY site to a "greenfield" & not a "brownfield" standard
Brattleboro, VT				PSD needs to support decommissioning as described in the PSDAR & SAS (best alternative for region other than keeping VY operational); protect economic benefits offered by VY to Windham County.
Brattleboro, VT				Transfer cooler fuel to dry cask now rather than waiting to 2016 or 2017; this will reduce risk of zirconium fire
Brattleboro, VT				Supports Entergy's efforts to date in responsible decommissioning
Montpelier, VT				Encourage all sides involved to adhere to terms of Settlement Agreement. Assure that economic development commitments made for Windham County are preserved; return site to greenfield as soon as possible.



December 10, 2014

Vermont Public Service Department
ATTN: PSDAR/SAS Comments
112 State Street - Drawer 20
Montpelier, VT 05620-2601

Dear Mr. Leshinskie:

The Windham Regional Commission is writing to comment on the Site Assessment Study (SAS) and Post-Shutdown Decommissioning Activities Report developed by Entergy Vermont Yankee ahead of their announced intent to cease operation of the nuclear power station located in the Town of Vernon, Vermont by the end of December, 2014. WRC is the regional planning commission that serves 27 towns in southeastern Vermont, including the 23 towns of Windham County, Readsboro, Searsburg and Winhall in Bennington County, and Weston in Windsor County. The Windham Region is the host region of the station.

The WRC has always maintained a neutral position as to whether or not the plant should continue operation, as well as the merits of nuclear power for that matter, in order to facilitate conversations among all sides of the issue. Therefore, we approach the closure and decommissioning phase with a history of having been neither pro- or anti-Vermont Yankee or pro- or anti-nuclear power. We have, however, developed positions on decommissioning, spent fuel management, site restoration standards, and responsibility for decommissioning costs that we feel are in the best interests of the host region.

Through participation as a party in dockets related to Vermont Yankee before the Vermont Public Service Board, the WRC has for several years explored the issues surrounding the eventual cessation of operations at the station, whenever and for whatever reason that might occur. The following excerpt from the Windham Regional Plan, which took effect November 4, 2014, describes the positions of the WRC concerning the decommissioning of the station, as well as spent fuel management, site restoration, and responsibility for the costs associated with each. While this language describes actions the WRC feels the Vermont Public Service Board should have taken in their order related to Docket 7862, our policy positions have not changed.

The Windham Regional Commission has always maintained a neutral position on the question of the continued operation of the Entergy Nuclear Vermont Yankee power station located in Vernon. The WRC has taken this position so it could

facilitate discussion among those on all sides of the issue. The Commission has, however, been very involved in Vermont Public Service Board dockets since 2007, arguing not for whether or not the plant should continue operation, but rather for what is in the best interest of the region when the plant does eventually cease operation, whenever and for whatever reason that occurs. The WRC interests are to mitigate to the greatest extent possible the economic, employment, cultural and social impacts of the plant's closure on the region; to advocate for the fiscal well-being of towns; and to advocate for the restoration of the Vermont Yankee site to greenfield status as soon as possible so that it may be reused. These positions were most recently stated in the WRC's Initial Brief filed on August 16, 2013 in Public Service Board docket 7862...The following summarizes those positions excerpted from the brief:

- Recognize the value of the Station to the region and state while it is operating, and that the general good would be best served if, upon cessation of operations, the Station is promptly decommissioned with complete site restoration so that the site can be reused and serve the orderly development of the region and state.
- Require that ENVY (Entergy Nuclear Vermont Yankee), ENO (Entergy Nuclear Operations), and Entergy Corporation be held jointly and severally responsible for all costs associated with operations, decommissioning, spent fuel management, and site restoration.
- Require the prompt and complete decommissioning and site restoration of the VY Station after shutdown (whenever that occurs) and prohibit the use of SAFSTOR. The best way to accomplish this is to ensure the decommissioning trust is adequate.
- Recognize the Decommissioning Cost Analysis prepared by TLG is inadequate. The Board should specifically recognize the Decommissioning Cost Analysis and Decommissioning Trust Fund do not adequately account for the costs of removing all structures, reasonable property taxes, and additional elements identified by other parties. The Board should require that Entergy VY fully fund the decommissioning trust to cover all potential costs associated with radiological decommissioning, spent fuel management, and complete site restoration without the use of SAFSTOR.
- Require Entergy VY to meet its MOU (memorandum of understanding) commitment to remove "all structures" as part of site restoration, rather than just removing structures to three feet below grade.
- Require Entergy VY to establish separate and adequate funds to cover radiological decommissioning, spent fuel management, and site restoration, and require substantial additional payments into those funds.
- Require Entergy VY to identify a suitable location for a second ISFSI (independent spent fuel storage installation).

- Require Entergy VY to consider shifting spent fuel from wet to dry storage, or alternatively require a payment-in-kind into the decommissioning trust as if fuel had been moved.
- Additionally, the Board should require that Entergy VY provide funding to the decommissioning trust to cover all the costs of managing spent fuel derived from any period of extended operations after March 21, 2012.
- Require specific actions from Entergy VY to comply with its commitment to use its “commercial best efforts” to have the spent fuel removed from Vermont.

The WRC feels that these positions are in the best interest of the region and the state. What Entergy Nuclear Vermont Yankee intends to do upon closure is on the record, under oath, before the Public Service Board. The Commission’s position was developed in response to what has been entered into the record. The Public Service Board docket remains open, and the WRC believes that these positions should serve as the primary point of negotiation between the State and Entergy going forward. This filing, and other information related to the Commission’s work on Vermont Yankee, can be found on the WRC website at <http://windhamregional.org/vermont-yankee>.

Additionally, at the request of the Town of Vernon and using a Municipal Planning Grant, the WRC prepared a study titled, *Resiliency Action Plan for the Town of Vernon in Preparation for the Eventual Closure of the Vermont Yankee Nuclear Power Station*. This plan, completed in June 2012, explains the closure and decommissioning process and what actions the town can take to prepare. It is available here: <http://windhamregional.org/images/docs/vy/exhibits/wrc-cross-35.pdf>. As noted in the plan, federal law and regulations do not require Entergy Nuclear Vermont Yankee to work with the town or the region as they prepare for closure and decommissioning, but the WRC hopes they will voluntarily do so. The WRC is prepared to assist in this effort and has reached out to its counterparts in New Hampshire and Massachusetts to engage them in preparing for the closure of the plant as well.

The WRC recognizes the significant and diverse impacts the closure of the plant will have on the region, including its towns, families, friends, neighbors, businesses, and economy. The WRC has invested considerable staff and volunteer resources over the last six years in preparation for the plant’s eventual closure in order to understand its impacts and develop mitigation strategies. The WRC stands by to assist its towns with planning for a post-Vermont Yankee future, to lead a regional resiliency planning effort, and to provide support in statewide response and recovery efforts. Mitigating the impacts on the region’s economy will require region-wide solutions, and the WRC will continue to participate in and support the Southeast Vermont Economic Development Strategy and the development of a Comprehensive Economic Development

Strategy, led by our regional partner, the Brattleboro Development Credit Corporation. The Commission will also encourage Entergy to voluntarily work with the region and our towns to establish a working group through which there will be clear communication about what the plant intends to do and what those actions mean for our communities. We all must work together to plan for resiliency as the region loses not only a major employer and economic engine, but also many plant workers and their families (Windham Regional Plan, 2014, pp. 112-113).

The PSDAR proposes the use of SAFSTOR rather than DECON, or prompt decommissioning. This is contrary to what the WRC maintains is in the best interests of the region, its towns, and its residents. It also proposes that remaining structures be demolished to a depth of only 3 feet below grade and the excavations backfilled. This is similarly contrary to WRC policy and has significant implications for the sufficiency of the site restoration fund.

As is noted in the PSDAR, a settlement agreement was arrived at between Entergy Nuclear Vermont Yankee and Entergy Nuclear Operations and the Vermont Public Service Department, the Agency of Natural Resources, the Department of Health. The WRC was not a party to the negotiations that created the agreement nor was it a signatory. Our position on the settlement agreement, and related memorandum of understanding, was stated in our Post Hearing Brief and Proposal for Decision filed with the Vermont Public Service Board in Docket 7862:

Based on our understanding of past plant closures and decommissioning, and information testified to under oath by Entergy VY, the most effective way to mitigate the employment and economic impacts of the closure is prompt decommissioning. The MOU between the state and Entergy VY does not call for prompt decommissioning. It also does not assign responsibility for decommissioning costs jointly and severally to the local corporate entities and the parent corporation, it does not establish a specific standard to which the site will be restored, and it does not provide a guarantee that the Decommissioning Trust Fund (or supplemental Site Restoration Fund) will be sufficient.

We bring this to the reader's attention because as we transition from the regulation of a plant that is operational to one that is ceasing operations and entering the post shutdown decommissioning activities phase, we would again ask that Entergy Nuclear Vermont Yankee and its parent companies, state agencies, and federal agencies to again consider the positions that, after much deliberation, the WRC has determined to be in the best interests of the host region and its towns and residents.

Concerning the technical contents of the site assessment study and PSDAR, the WRC has made a verbal request to the Public Service Department that it retain the service of nuclear power station decommissioning professionals to provide an objective and informed review of the decommissioning and site restoration cost estimates and their underlying assumptions. We were told that the Department was in the process of retaining such a professional. The WRC

does not possess the expertise or resources to hire an expert to analyze the sufficiency of the information presented in the site assessment study or PSDAR. Our only frame of reference is that information presented by the parties in the most recent and past Public Service Board dockets. The concerns raised by the Public Service Department and its expert witnesses in Docket 7862 give us reason to ask that the sufficiency and accuracy of the decommissioning and site restoration costs and their underlying assumptions be subject to expert, objective review.

A matter that was not addressed as specifically in our regional plan is the continued support by Entergy Nuclear Vermont Yankee of external emergency planning support. Our position can be summarized by our comments to the Vermont Public Service Board in Docket 8300, which was opened to review the request for a certificate of public good for a second ISFSI (Independent Spent Fuel Storage Facility). This document is available on the WRC Vermont Yankee web page <http://windhamregional.org/vermont-yankee>.

While we understand the potential for a catastrophic event will lessen once the Station ceases operations, there remains the potential for a significant event as long as spent nuclear fuel is stored on site, and regional emergency service providers must always be prepared to respond, and must be adequately funded to do so.

WRC recognizes that on-site nuclear safety is regulated by the NRC, but off-site responders must be prepared to deal with any emergency that might occur on-site whether or not it extends to the off-site environment. And the Board traditionally deals with emergency management issues and funding for off-site emergency support in other dockets dealing with different fuels such as natural gas. Likewise, it is not uncommon in non-nuclear Section 248 and Act 250 cases for petitioners to agree to cover specialized equipment and training costs necessitated by the unique elements of proposed development.

The Board should seek additional information from Entergy VY about all potential scenarios that might require an on-site or off-site emergency response, the type of response needed, and the cost for providing these services (including the costs of ongoing training necessary to respond).

State agencies are holding discussions with Entergy VY about emergency response issues and are seeking input from the WRC and towns within the Emergency Planning Zone, and we hope a resolution of our concerns can be accomplished outside of the CPG process. The Board should be mindful of where funding for emergency services will come from, and should consider prohibiting the use of the Decommissioning Trust Fund for this purpose because, as described elsewhere in these comments, Entergy VY has previously done so little to identify, secure, and fund alternative spent fuel storage options (Windham Regional Commission Comments RE: Entergy VY Petition for a Certificate of Public Good for a Second Spent Fuel Storage Facility, August 13, 2014, p. 17).

We are encouraged that Entergy Nuclear Vermont Yankee plans to offload fuel from the spent fuel pool to dry cask storage within a reasonable time frame, and we support the company's exploration of financing at these costs so as to reduce funds that would be taken out of the decommissioning trust fund. We also appreciate the willingness of Entergy Nuclear Vermont Yankee and Entergy Nuclear Operations to participate in the Nuclear Decommissioning Citizens Advisory Panel. While we may disagree with the decommissioning plans of the plant, it is important to have a forum where issues can be discussed and where common ground may be found. We do recognize that the Panel was formed to advise the state, and not the plant. It is our understanding that other advisory panels formed in response to decommissionings were intended to advise the plant as well. We hope that over time, Entergy Nuclear Vermont Yankee will be amenable to the panel assuming such a role.

Thank you for your consideration of our comments. Please contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Campany". The signature is fluid and cursive, with a large initial "C" and a long, sweeping tail.

Chris Campany, AICP
Executive Director

TL

TOWN OF BRATTLEBORO

STATE OF VERMONT
DEPT OF PUBLIC SERVICE
MONTPELIER, VT.
05620-2601

Vermont Public Service Department
ATTN: PSDAR/SAS Comments
112 State Street – Drawer 20
Montpelier, VT 05620-2601

2014 DEC - 1 A 10: 09

November 24, 2014

Draft PSDAR/SAS

Dear Mr. Leshinskie,

Thank you for the opportunity to make comment on the Draft Post Shutdown Activities Report (PSDAR) as required by Title 10 of the Code of Federal Regulations (CFR) 50.82, "Termination of License," paragraph (a)(4)(i) for the Vermont Yankee Nuclear Power Station (VYNPS), including the Site Assessment Study (SAS) an obligation under the settlement agreement (Agreement) between the State of Vermont (VT), Entergy Nuclear Vermont Yankee (ENVY) and Entergy Nuclear Operations (ENO), negotiated in December 2013. It is our understanding that the comments provided below will be considered for inclusion with the Public Service Department's (PSD) comments that will subsequently be provided to Entergy for incorporation with its PSDAR submittal to the United States Nuclear Regulatory Commission (NRC). We further understand that comments from the Vermont Nuclear Decommissioning Citizen Advisory Panel (VNDCAP) from their meetings of November 20 and December 18, 2014 on the PSDAR/SAS may also be included by ENVY in their submission to the NRC.

As the regional center for Windham County, Brattleboro stands to suffer the biggest indirect economic impact of the plant closure and given the proximity of the site (just under seven miles from the center of Brattleboro) Brattleboro remains concerned about the ongoing public safety issues with the plant, the length of time and cost of radiological decontamination and site restoration and the eventual repurposing of a large industrial site of regional significance. We have specific comments in relation to the draft PSDAR and SAS below.

1. **SAFSTOR Economic Impact versus DECON:** The SAS outlines a SAFSTOR approach to decommissioning with the transition to 'dormancy' proposed for 2020. We take on good faith Entergy VY's commitment to "prompt decommissioning" while seeking the SAFSTOR method. We further note that even an optimistic date for commencing dismantling and decontamination is set at 2040. The DRAFT PSDAR responds to socio-economic conditions created by the decommissioning and site restoration process by concluding that under the analysis used by the Generic Environmental Impact Study (GEIS) "economic impacts are neither detectable nor destabilizing and that mitigation measures are not warranted" (p29). Yet, the discussion of the GEIS establishes that large plants in rural areas closing early and using the SAFSTOR option were *the likeliest to have negative impacts* (emphasis added). In light of this finding and the intent of the Agreement Brattleboro requests that radiological decommissioning be conducted using DECON so that the site can be returned to unrestricted use as soon as possible, thus minimizing the social and economic impact of the decommissioning process as acknowledged in the GEIS.
2. **Prompt Decommissioning:** The Town of Brattleboro endorses the position of WRC in calling for a prompt decommissioning such that complete site restoration (subject to the Agreement) takes place as soon as practical. This will ensure the site may continue to contribute to the orderly development of Vernon, Brattleboro, the region and the state. We note with concern that the

SAS operates with the assumption that SAFSTOR allowing ENVY up to sixty years “to release the VYNPS site for unrestricted use”.¹

3. **Decommissioning Trust Fund Management:** The Town of Brattleboro remains concerned that Entergy proposes utilizing the Decommissioning Trust Fund (DTF) for spent fuel management while simultaneously pursuing cost recovery actions against the Department of Energy (DOE). As currently structured, failure to collect from the DOE impacts the growth of the DTF. Spent fuel management should more properly be considered an operational cost, with no impact on the DTF. Brattleboro was reassured that Entergy is “pursuing a funding strategy for decommissioning that would rely on use of the... [DTF] and additional lines of credit”². Brattleboro would prefer that the DTF be restricted to narrowly defined decommissioning tasks, and that spent fuel management functions be paid for through a dedicated fund or line of credit, able to be reviewed by all parties to the Agreement. If and when ENVY recaptures further costs from DOE the reimbursement (net any associated legal and administrative costs) can be shown in such a single purpose fund or credit line. ENVY must be able to show that ongoing disputes concerning spent fuel management or any other non-decommissioning activities do not have a negative impact on the growth of the DTF.

While Entergy VY has established a separate Site Restoration Fund (SRF) the management of this fund should be fully separate from the DTF. It remains unclear as to whether some Site Restoration expenses still appear to be dependent on growth in the DTF. Site restoration should ensure full economic re-use of the land (including the removal of all underground structures and pipes). The SAS is a significant commitment to summarizing in one document the history of the VYNPS site. Brattleboro understands the challenge of needing to wait for the plant to shutdown to conduct a more meaningful assessment of radiological and hazardous waste contamination. The costs and scope of work for site restoration in keeping with the intent of the Agreement is still clouded with uncertainty and we ask that continued analysis and decision-making allow for public input.

4. **Adequacy of the SRF:** The commitment in the Agreement to establish a SRF is inadequate to meet the forecasted costs of such work. Entergy VY has committed a \$20 million guarantee by 2017 to assure fund growth up to \$60 million. Meanwhile the combined cost of decommissioning, spent fuel management, and site restoration have been estimated to cost more than a billion dollars with site restoration expected to exceed \$225 million.
5. **Licensing Agreement Requests (LARs) re: Emergency Planning Zone and Emergency Response Organization:** Brattleboro joins with the WRC and the State of Vermont in seeking to maintain the existing EPZ until all spent fuel is placed in dry cask storage on-site or is transported from

¹ Entergy Vermont Yankee, Site Assessment Study, October 2014

² See Draft Minutes, Vermont Nuclear Decommissioning Citizens Advisory Panel (NDCAP) October 30, 2014

the site.³ As proposed the EPZ will be reduced to the ENVY property line within 16 months of permanent plant shutdown. This would result in the elimination of two off-site levels of emergency response (Site Area Emergency and General Emergency Action). We believe this poses an unacceptable risk to emergency services personnel and the public. Brattleboro also considers that maintenance of an appropriate RERP is an operational cost and therefore the DTF should not be used to pay for RERP commitments.

The Town of Brattleboro appreciates the opportunity to comment on this extremely important phase in the operation of VYNPS. As the commercial and service center most affected by these changes Brattleboro knows the decisions made by the Department of Public Service and the Agencies of Human Services (VDH) and Natural Resources (DEC) along with VYNPS through the implementation the Agreement and/or the proceedings of the NRC will have a very large long term impacts on the health, welfare and environment of our community. We ask that you remember this in your deliberations and actions. On behalf of the Selectboard I thank you for your ongoing commitment to protect the health, environment and economic opportunity of our community.

Yours Sincerely,



David Gartenstein
Chair of the Selectboard

CC: Christopher Recchia, Commissioner of Public Service
David Mears, Commissioner of Environmental Conservation
Dr. William Irwin, VT Department of Health

³ Ibid.

To: Anthony Leshinskie (anthony.leshinskie@state.vt.us)
From: Tom Buchanan (emailtombuchanan@gmail.com)
Date: November 26, 2014
Re: PSDAR/SAS Comments

I am offering personal comments for consideration by the Department of Public Service regarding the Vermont Yankee Site Assessment Study (SAS) and Post Shutdown Decommissioning Activities Report (PSDR).

From 2005 through September 2014 I was a commissioner on the Windham Regional Commission (WRC) representing the town of Londonderry, Vermont. I served as chair of WRC Energy Committee and Vermont Yankee Study Committee, and in that capacity worked closely with Jim Matteau and Chris Campany. I was directly involved in developing WRC's Vermont Yankee related advocacy and structuring arguments before the Vermont Public Service Board (PSB) through dockets 7440, 7600, and 7862, and formulating WRC's comments filed in docket 8300. I no longer serve as a regional planning commissioner, and thus offer these comments as a knowledgeable citizen.

I did not begin my review of the SAS and PSDAR until the weekend of November 23, and have given these documents only a short review, but nevertheless I'm disturbed by some of the underlying assumptions and a lack of expected detail. I'm also troubled that Entergy VY has identified a "*maximum*" inclusive cost for radiological decommissioning, spent fuel management, and site restoration of just \$1.242 billion (SAS pages 46-51, section 8.1.1) while using assumptions that exclude many potential costs and contingencies. The TLG estimates should not be accepted by the Department or the NRC as maximum or as bounding.

I hope the State of Vermont will examine these important planning documents in much greater detail. If you need any of the source material I have mentioned in these comments, please let me know.

Here are my initial thoughts:

- 1) The plan assumes that all spent fuel will be removed from the station beginning in 2026 and concluding by 2052, and that the SAFSTOR Dismantling and Decontamination (D&D) process will take place with no fuel on site. The movement of fuel off site makes the D&D process much easier, and can reduce costs (SAS, pages 24 and 58). The lack of fuel on site was assumed for the TLG SAFSTOR scenario, but not for the three alternative estimates for prompt DECON. Entergy VY should not be permitted to base their costs on the removal of fuel from the site in 2052. In docket 7082 (the first dry fuel storage pad approval by the Vermont PSB) the Department argued that it would be prudent to use a longer planning horizon, PSB then required Entergy VY to amend its

Spent Fuel Management Plan (SFMP) with an assumption that fuel would remain on site until at least 2082, and Entergy VY agreed to that condition (docket 7082 Board Order, April 26, 2006, pages 80-81, page 91 condition 10; CPG condition 9). Entergy VY should be required to meet the 2082 fuel removal standard in planning and budgets related to decommissioning that are presented to the NRC. It simply does not make sense to accept a DOE schedule for pick-ups beginning in 2026 when DOE lacks a place to permanently store fuel, and has told Congress it lacks authority to accept fuel for interim storage.

- 2) As noted above, in docket 7082 PSB required Entergy VY to revise its SFMP to accommodate a longer planning horizon that considers fuel storage on site through 2082, at a minimum. The SFMP dated June 2006 acknowledges this requirement (section 3.4) and the TLG Decommissioning Cost Estimates dated January 2007 and February 2012 include calculations for both DECON and SAFSTOR options with fuel on site until 2082. Entergy VY maintains this approach in section 3.4 of SFMP revision 1 dated November 2008, revision 2 dated March 2011, revision 3 dated March 2013, and revision 4 dated June 2014, but adds language to revision 4 (section 3.2) identifying a new DOE long range plan that assumes DOE will remove all fuel by 2052, and attributes this to *“updated information regarding the DOE’s removal schedule.”* The SAS identifies the probable source of this assumption as the U.S. Department of Energy’s January 2013 *“Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste”* (SAS page 24, section 2.3) As of this date it appears the DOE’s plan is nothing more than a statement of policy objectives which lacks a siting process, a new organization to execute management of waste, stable funding, and most importantly legal authority from Congress. At best the Plan identifies objectives of establishing a single pilot interim site in 2021, a larger interim site in 2025, and *“demonstrated progress on the siting and characterization of repository sites to facilitate the availability of a geologic repository by 2048”* (DOE Strategy Report, page 2). The Plan does not identify where any of these sites might be located, what fuel or quantities of fuel will be accepted from any specific nuclear sites, nor does the Plan offer a schedule for fuel pick-ups. The guidance provided by DOE is not sufficient to alter the PSB’s order in docket 7082 that requires Entergy VY to plan for maintaining fuel on site through at least 2082, and indeed the nebulous nature of the latest DOE Plan supports a conclusion that the federal government will be unable to remove the fuel within any foreseeable timeframe. Therefore, the Department should advise PSB that Entergy VY has inserted new language into the required SFMP dated June 2014 which identifies long range planning that assumes DOE acceptance of all spent fuel by 2052, and uses this as the basis for the latest PSDAR and SAS, which may be inconsistent with the Board Order and CPG in docket 7082.

- 3) The SAS and PSDAR assume a second dry fuel storage pad (ISFSI) will be constructed, and the SAS makes note that Entergy VY submitted a petition to the Vermont PSB for this ISFSI on June 30, 2014 (SAS page 24). The PSDAR addresses the ISFSI approval process on page 12 and assumes completion of the second ISFSI by 2017. However, on July 25, 2014 and again on October 29, 2014 Entergy VY asked the PSB to delay proceedings on the new ISFSI pending additional engineering studies. This appears to be a tactical effort to sequence NRC approvals first, and to do so based on an incomplete PSB petition. While it's likely a new ISFSI will eventually be approved, Entergy VY should not base its plans and budgets on the existence of an ISFSI for which it has not even submitted an actionable petition.
- a. There is an additional concern related to the pending petition for a new ISFSI. When Entergy VY sought authorization for the first ISFSI in docket 7082 it made clear that if fuel hadn't been removed by DOE at the time of shutdown, a single larger ISFSI would be required, and that it would be a consolidated new pad positioned outside the protected area and far removed from the power block area because that distance would be necessary to support decommissioning activity. Now however, Entergy VY is attempting to secure approval for a second ISFSI next to the existing pad, which could inhibit decommissioning. The Department should carefully review the plan for the second ISFSI and determine what affect it might have on decommissioning and if a better option exists. Please see WRC's general comments and the review of the historical record as listed in the docket 8300 WRC comment letter filed on August 13, 2014, and make note of the references in footnote 23 on page 7.
 - b. There does not appear to be a standard or even a commitment for site restoration of the ISFSI(s) following the removal of spent fuel. The docket 7862 Settlement Agreement assumed spent fuel would still be on site at the conclusion of plant decommissioning and site restoration, and thus excluded site restoration of the existing ISFSI from current requirements (paragraph 8). The Department should assure that Entergy VY fully restores the site of the existing ISFSI and the site of any future ISFSI approved by the PSB.
- 4) In docket 7862 Entergy VY agreed not to use a disposal option known as "*rubblization*," which the settlement agreement defines as "*demolition of an above-grade decontaminated concrete structure into rubble that is buried on site*" (paragraph 8). I recall that a Department witness in docket 7862 suggested Entergy VY may have based its budgets on trucking some of the least contaminated concrete rubble and soil from the site for disposal as fill within the tri-state region. The new plan may be taking a similar approach. The Department should ensure that Entergy VY isn't planning to dispose of rubble that it has agreed not to bury on-site, as fill throughout Vermont, Massachusetts, and New Hampshire, and should make sure the budget does not include this option. The

public should be comfortable that the material Entergy VY can't bury on site won't be used as fill in local communities. Further, Vermont is bound by the Texas Compact which requires that all applicable radiological waste be shipped to the Texas facility for burial. The plan submitted by Entergy VY recognizes that other licensees have used lower grade disposal options (SAS, page 44), and may assume some of Vermont's low grade material can be disposed of outside of the Texas Compact at less cost. Entergy VY should not be permitted to budget on the disposal of waste outside of the Texas Compact unless it first obtains a waiver to do so.

- 5) The PSDAR states that radioactive decay during the SAFSTOR period *“will significantly reduce the quantity of contamination and radioactivity that must be disposed of during decontamination and dismantlement”* (page 16). Likewise, the SAS lists a positive attribute of SAFSTOR as *“a potential reduction in the amount of waste disposal space required”* (page 42). The SAS also discusses the analysis of the Pacific National Laboratory which provides a generic range of radioactive waste volumes for the SAFSTOR method, and notes that SAFSTOR waste volumes may be similar to the DECON method (SAS page 44). The PSDAR states that *“it is assumed that radioactive contamination on structures, systems, and component surfaces will not have decayed to levels that will permit unrestricted release”* (page 13). Entergy VY reported one of the biggest differences in vendor projected costs provided in the SAS (page 50-53) was based on the volume of waste each expected to dispose of at licensed radiological disposal facilities (see page 51, bullet 2). Prior Decommissioning Cost Analyses (DCA) prepared by TLG Services show similar waste volumes with DECON and SAFSTOR, but generally slightly higher volumes for the SAFSTOR option. WRC provided a review of DCA language and waste volumes in its docket 7862 Reply Brief dated October 25, 2013, beginning on page 21. The WRC brief quoted as follows from pages 15-16 of the 2001 TLG DCA; *“Given the levels of radioactivity and spectrum of radionuclides expected from thirty to forty years of plant operation, no plant process system identified as being contaminated upon final shutdown will become releasable due to the decay period alone, i.e., there is no significant reduction in waste volume in delaying decommissioning. In fact, SAFSTOR estimates can show a slight increase in the total projected waste volume, due primarily to initial preparation activities for placing the unit in safe-storage, as well as from follow-up housekeeping tasks over the caretaking period for the station.”* Given the uncertainty regarding projected waste reductions, Entergy VY should not budget based on wishful thinking that waste volumes will be reduced over time through SAFSTOR, but should instead assure budgets and financing will allow for disposal of the maximum amount of potential radiological waste.
- 6) Entergy VY maintains a comingled Decommissioning Trust Fund and a separate Site Restoration Fund. Entergy VY expects to recover significant damages from the

Department of Energy (DOE) for spent fuel management expenses, and expects to use the anticipation of recovering these funds to meet its NRC requirement to fund decommissioning and future spent fuel management costs. In docket 7862 Entergy VY acknowledged that at least some of the excess Decommissioning Trust Funds remaining at the conclusion of radiological decommissioning would likely be used to fund site restoration. The Settlement Agreement also allows for DOE recoveries to be placed in a comingled NDT, or a separate fund “*dedicated to meeting the liabilities of EVY, including decommissioning, SNF management, and site restoration*” (paragraph 11). Entergy VY makes note of the potential use of these recovered funds for site restoration in the SAS on page 57. While the Settlement Agreement established a separate and exclusive site restoration fund, it does not appear to have completely cleaved site restoration expenses from the use of the existing comingled trust fund. And, many expenses can reasonably be categorized as either site restoration or nuclear decommissioning, which makes segregated funding less efficient, less certain, and less secure. The Department should advocate that the NRC not allow any DOE recoveries to be used to reduce required decommissioning funding unless and until all site restoration costs have been fully funded, and should require that DOE recoveries be placed in a separate fund as described in the Settlement Agreement.

- 7) Entergy VY has not provided sufficient information to determine site restoration standards. The SAS was designed to form the basis for defining site restoration standards, and the parties to docket 7862 anticipated the Board would hold hearings, probably in 2015, to determine the standards that will apply (docket 7862, Board Order, page 88). When Entergy VY purchased the VY Station it agreed to “*removal of all structures*” but has since argued that this very clear standard requires only the removal of non-contaminated structures that are visible above the surface to an arbitrary depth of three feet below the surface (radiologically contaminated structures will be removed regardless of depth based on NRC requirements). The difference is significant. In dockets 7440 and 7862 Entergy VY identified multiple foundations that extend forty to fifty feet below the surface, and a vast network of pipes and deep tunnels that are big enough for a man to walk through. Witnesses in docket 7862 estimated the cost of removing all structures as Entergy VY agreed to do in docket 6545 at \$100 million. Entergy VY does not appear to have included any of these costs or a related contingency to accommodate a negotiated alternative within its projected budget.
 - a. The NRC requires a radiological release standard of 25 mrem (plus ALARA), but other sites, including as Maine Yankee have been cleaned to a tighter standard such as 10mrem. The Department has advocated for a tighter standard, but the SAS provides no basis for determining the cost or complexity of meeting a tighter standard.

- b. In docket 7862 Entergy VY estimated the cost of site restoration as \$47 million, to include only the NRC standard of 25 mrem and removal of (non-contaminated) structures to just three feet. Witnesses for the Department testified the TLG estimates were too low and then calculated the cost for the same scope of work as between \$94 million and \$126 million, a difference of as much as \$80 million (docket 7862 WRC Initial Brief, page 53, findings 126-131).
 - c. The SAS and PSDAR estimate site restoration cost as \$57 million, assuming a 25 mrem standard and removal of structures to just three feet. This estimate appears to have also been used in the SAS to “normalize” the inclusive estimates provided by alternative vendors (SAS page 53). The actual cost of site restoration cannot be known at this point because in spite of extraordinary efforts by the Department and other parties in dockets 7440 and 7862, Entergy VY still hasn’t provided sufficient information, or even an accurate inventory of subsurface structures. Thus, for the purposes of budgeting, Entergy VY should be required to plan for the removal of all structures and a radiological standard of 10 mrem, and all site restoration and inclusive estimates should be increased by a contingency of at least \$100 million. The Department should make the NRC aware of these costs and should oppose using any decommissioning funds for spent fuel management until all site restoration costs have been covered.
- 8) The TLG total cost estimate of \$1.242 billion for radiological decommissioning, spent fuel management and site restoration (SAS page 53, PSDAR page 9) makes no sense in the context of competing estimates for prompt decommissioning provided in the SAS. In past Decommissioning Cost Analyses TLG has consistently shown that the total inclusive cost for SAFSTOR is higher than DECON for similar scenario pairings, yet the TLG estimate for SAFSTOR provided in the SAS is significantly below the DECON costs estimated by the other three vendors. Part of this variation may be due to the assumption that spent fuel has been removed in the SAFSTOR scenario but not the DECON scenario, although the discrepancy is large, and is more likely due to TLG’s inadequate estimating practices. TLG and Entergy VY have consistently offered estimates that are unrealistic, beginning with a claim when they bought the VY Station that the fund would likely be sufficient for prompt decommissioning by 2012, and a commitment that if the Station operated until 2012 “*in the worst case, ENVY would start decommissioning activities in 2022 and finish in 2031*” (WRC docket 7862 Initial Brief, page 45, findings 89-90). With every new TLG report the projected date of decommissioning and site restoration moves further out. The Department should reject the latest TLG estimates as deeply flawed, and should oppose using any TLG estimates in the SAS and PSDAR.
- 9) The size of the VY site needs to be clarified. In docket 7440 Entergy VY identified the site as 125 acres. In docket 7862 Entergy VY identified the site as “*approximately 148*”

acres,” and attributed the increase to additional property purchases. In the SAS, Entergy VY once again identifies the site as “about 125 acres” (page 7). The reduction in the size of the site may be attributed to a 99 year land lease to VELCO, for which Entergy VY maintains responsibility for any required remediation below the ground surface (SAS on page 39). The specific number of acres isn’t a critical issue, but the Department should clarify the size and inclusiveness of the VY site so all discussions begin with a consistent understanding of site specifics.

- 10) The SAS includes a section detailing Entergy VY’s perceived “*benefits of SAFSTOR*,” (SAS page 42) but offers no comparison to the benefits of DECON. Several of the benefits of SAFSTOR identified by Entergy VY are subjective or possibly even false. The Department should require Entergy VY to compare and contrast the benefits of SAFSTOR and DECON, or at the very least should not accept Entergy VY’s list of dubious benefits of SAFSTOR and should require that this section be struck from the document.

- 11) The list of insurance coverages includes only one policy extending beyond 2014. It is not clear how Entergy VY will fund any potential claims after 2015, and most notably how Entergy VY will fund a claim for a nuclear accident related to spent fuel, if such an accident were to occur. It is my understanding that while the Station is operating primary coverage is provided by site based insurance policies, and secondary coverage is provided by the nuclear industry as required by the Price Anderson Act. It is not clear if any coverage is provided for spent fuel accidents in either wet or dry storage once the station ceases operations. While the greatest risk occurs when fuel is in wet storage, there are unlikely but potential scenarios under which significant harms can occur on and off site even with all fuel in dry casks (docket 7862 WRC Comment letter, pages 14-17). The Department should require insurance that will cover any conceivable incident throughout the period of SAFSTOR, decommissioning, site restoration, and ongoing spent fuel storage.